UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 03/26/2008

NOTICE OF ALLOWANCE AND FEE(S) DUE

27365 7500 0326/2008
SEAGATE TECHNOLOGY LLC C/O WESTMAN
CHAMPLIN & KELLY, P.A.
SUITE 1400
900 SECOND AVENUE SOUTH

EXAMINER

KAPADIA, VARSHA A

ART UNIT PAPER NUMBER

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO.

09469-597 12221/1999 JAMES E, ANGELO S01.12-0543 5141

TILLE OF INVENTION: HEAD VIBRATION DETECTION DEVICE AND METHOD

 APPLN TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(S) DUE
 DATE DUE

 nonprovisional
 NO
 \$1440
 \$300
 \$0
 \$1740
 06/26/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

MINNEAPOLIS, MN 55402-3319

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This for appropriate. All further co- indicated unless corrected maintenance fee notification	orm should be used for rrespondence includin below or directed oth ns.	or trang the erwise	smitting the ISSU Patent, advance or in Block 1, by (a					
CURRENT CORRESPONDEN	CE ADDRESS (Note: Use Blo	ek I for	any change of address)	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
27365 7. SEAGATE TEC CHAMPLIN & KI SUITE 1400	O WESTMAN	nave to own centurate or maning or transmission. Levely certify that this Fee(s) Transmission is the control of the control o						
900 SECOND AV MINNEAPOLIS.								(Depositor's name)
MINITAL OLIG	MIN 33402-3319							(Signature)
				L				(Date)
APPLICATION NO.	FILING DATE	F		FIRST NAMED INVENTOR		ATT	ORNEY DOCKET NO.	CONFIRMATION NO.
09/469,597	12/22/1999	JAMES E. ANGEL			S01.12-0543 5141			
TITLE OF INVENTION: F					_			
APPLN, TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID IS	SUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1440	\$300	\$0		\$1740	06/26/2008
EXAMIN	ER		ART UNIT	CLASS-SUBCLASS	7			
KAPADIA, VA	ARSHA A	2627		360-025000	_			
1. Change of correspondent CFR 1.563. Change of correspon Address form PTO/SB/1 Tee Address' indica PTO/SB/47; Rev 0-302. Number is required. 3. ASSIGNEE NAME ANI PLEASE NOTE: LION 1640. (A) NAME OF ASSIGN	dence address (or Char 22) attached. stion (or "Fee Address" or more recent) attach O RESIDENCE DATA s an assignee is identi n 37 CFR 3.11. Comp	Indicad. Us	Correspondence ation form e of a Customer SE PRINTED ON T		to 3 registered pa attively, ggle firm (having a r agent) and the n torneys or agents, be printed. type) patent. If an ass an assignment.	tent attor is a mem ames of If no na ignee is	ber a 2up to me is 3	locument has been filed for
Please check the appropriat	e assignee category or	catego	ories (will not be pr	inted on the patent):	☐ Individual ☐	Corpora	tion or other private gr	oup entity 🗖 Government
4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies				h. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
 Change in Entity Status a. Applicant claims S 	MALL ENTITY statu	s. See	37 CFR 1.27.				TITTY status. See 37 C	
NOTE: The Issue Fee and I interest as shown by the rec	Publication Fee (if requords of the United State	ired) es Pat	will not be accepted ent and Trademark	from anyone other that Office.	n the applicant; a r	egistered	attorney or agent; or t	he assignee or other party in
Authorized Signature					Date			
Typed or printed name					Registratio			
This collection of informati an application. Confidentia submitting the completed a this form and/or suggestion Box 1450, Alexandria, Virg Alexandria, Virginia 22313	on is required by 37 C lity is governed by 35 pplication form to the s for reducing this bur ginia 22313-1450. DO -1450.	FR 1.3 U.S.C USPI den, sl NOT	11. The informatic . 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR O	on is required to obtain of 1.14. This collection is depending upon the in the Chief Information Off COMPLETED FORMS	or retain a benefit be estimated to take dividual case. Any icer, U.S. Patent a TO THIS ADDRI	y the put 2 minute commend Trade ESS, SEN	blic which is to file (an es to complete, includin ats on the amount of ti mark Office, U.S. Dep AD TO: Commissioner	d by the USPTO to process) ng gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



MINNEAPOLIS, MN 55402-3319

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

Press COMMISSIONER FOR PATENTS
P O Box 1450
Alexandria, Virginia 22313-1450
www uspto gov

DATE MAILED: 03/26/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/469,597	12/22/1999	JAMES E. ANGELO	S01.12-0543	5141
27365	7590 03/26/2008	EXAMINER		
SEAGATE TEC	CHNOLOGY LLC C/	KAPADIA, VARSHA A		
CHAMPLIN & K	ELLY, P.A.	ART UNIT	PAPER NUMBER	
SUITE 1400 900 SECOND AV	ZENUE SOUTH		2627	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)	
09/469,597	ANGELO ET AL.	
Examiner	Art Unit	
VARSHA A KARADIA	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative

- of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.
- This communication is responsive to 1/21/08.
- 2. The allowed claim(s) is/are 1-26 renumbered as 1-18, 20, 19 and 21-26, respectively...
- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) \square All b) ☐ Some* c) ☐ None of the:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received:

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) I including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date
- 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- 6. Interview Summary (PTO-413), Paper No./Mail Date
- 7. T Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

Reasons For Allowance

The following is an examiner's statement of reasons for allowance: Applicant's claimed invention differs from the prior art of the record for the same reasons indicated in the office action mailed on June 4, 2003 and as indicated by the applicant's representative in the response filed on 1/28/08.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VARSHA A. KAPADIA whose telephone number is (571)272-7557. The examiner can normally be reached on Mon Tue and Thurs. from 6:30 AM to 2:00 PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571 272 4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. A. K./ Examiner, Art Unit 2627

/Andrea L Wellington/ Supervisory Patent Examiner, Art Unit 2627